IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method for dynamic allocation of transmission resources to a plurality of communications between a base station and a plurality of mobile terminals, each resource including a plurality of possible configurations, a fast allocation controller associated with the base station being able to allocate to the communications only certain combinations of possible configurations, referred to as available resources, comprising:

~~generating a pseudo-random sequence seed at the fast allocation controller;~~

generating a pseudo-random sequence at the fast allocation controller; and

performing allocation at a regular interval at the fast allocation controller by selecting at least one available resource configuration for each of a plurality of communications between the base station and the plurality of mobile terminals at a start of each regular interval according to a value of the pseudo-random sequence;

~~transmitting the pseudo-random sequence seed to the plurality of mobile terminals;~~ and

~~generating an identical pseudo-random sequence as generated at the fast allocation controller at each of said plurality of mobile terminals based on the pseudo-random sequence seed so that each mobile terminal identifies a resource allocated thereto by the fast allocation controller,~~

wherein the generating generates the pseudo-random sequence by:

$X(1) = x_0$

$X(i+1) = \mathrm{mod}(a \cdot X(i) + b\text{-}1, 2^N) + 1$

where x_0 is a word of N bits, x_0 representing a seed of the sequence, a-1 is a non-zero integer which is a multiple of 4, i is a sequence index, and b is an odd number.

and where N is an integer such that 2^N is greater than a maximum number of available resources.

Claim 2 (Previously Presented): The method according to Claim 1, further comprising:

sequentially indexing each of the available resources for each regular interval, wherein a configuration of available resources is allocated if an index of the configuration is equal to a value in the pseudo-random sequence.

Claim 3 (Previously Presented): The method according to Claim 1, further comprising:

transmitting parameters for generating the pseudo-random sequence from the base station to the mobile terminals and generating the pseudo-random sequence by the mobile terminals from the generation parameters.

Claim 4 (Previously Presented): The method according to claim 1, wherein the transmission resources of a plurality of adjacent base stations are controlled by a slow allocation controller, the resources available for each base station are determined regularly, at a first frequency, by the slow allocation controller and transmitted by the slow allocation controller to the fast allocation controllers associated with the base stations.

Claim 5 (Previously Presented): The method according to Claim 1, further comprising:

transmitting an item of information supplying the resources available at the base station to the mobile terminals which the base station serves.

Claim 6 (Previously Presented): The method according to Claim 4, wherein the performing the allocation allocates the resources available at the base station at a second frequency corresponding to the regular interval, the second frequency higher than the first frequency.

Claim 7 (Previously Presented): The method according to Claim 1, wherein the resources include at least one of transmission time slots, spectral spreading codes intended to separate the different communications and transmission frequencies.

Claim 8 (Canceled).

Claim 9 (Previously Presented): The method according to Claim 7, wherein each base station and the mobile terminals form a portion of a UTRA-TDD mobile telecommunication system, a first subset of available resources is dedicated to uplink communications and a second subset of available resources is dedicated to downlink communications, and wherein the allocating allocates the available resources of the first subset to the uplink communications independently of allocating the available resources of the second subset to the downlink communications.

Claim 10 (Previously Presented): The method according to Claim 3, wherein the transmitting transmits the parameters for generating the pseudo-random sequence over the common control channel BCH.

Claim 11 (Currently Amended): A communication system including:

a plurality of adjacent base stations including a base station;

a plurality of mobile terminals, each mobile terminal having a communication transmitted from the base station in the plurality of adjacent base stations;

a plurality of transmission resources, each transmission resource including a plurality of possible configurations that may be allocated to the communications of the plural mobile terminals;

a fast allocation controller associated with the base station and configured to generate a pseudo-random sequence at a first regular interval, transmit a seed for each first regular interval for generating the pseudo-random sequence to the plurality of mobile terminals, and allocate at a start of each first regular interval the available resources to each communication in the plurality of communications from the base station to the plurality of mobile terminals according to a value of the pseudo-random sequence;

a slow allocation controller configured to determine, at a second regular interval, available resources for each base station, the available resources including a subset of the possible configurations, said slow allocation controller further configured to transmit the available resources to the fast allocation controller, said second regular interval longer than said first regular interval;

said mobile terminals further configured to generate an identical pseudo-random sequence as generated at the fast allocation controller at each mobile terminal based on the seed so that each mobile terminal identifies a resource allocated thereto by the fast allocation controller,

wherein the fast allocation controller and the mobile terminals are configured to generate the pseudo-random sequence by:

$X(1) = x_0$

$X(i+1) = \mathrm{mod}(a \cdot X(i) + \mathrm{b}\text{-}1, 2^N) + 1$

where x_0 is a word of N bits, x_0 representing a seed of the sequence, a-1 is a non-zero integer which is a multiple of 4, i is a sequence index, and b is an odd number, and where N is an integer such that 2^N is greater than a maximum number of available resources.

Claim 12 (Currently Amended): A method for dynamic allocation of transmission resources to a communication between a base station and a plurality of mobile terminals, each resource including a plurality of possible configurations, the method comprising:

determining available resources at first regular interval, the available resources including a subset of the possible configurations of each transmission resource to be made available to the base station;

generating a pseudo-random sequence for the base station, said pseudo-random sequence being generated from a seed;

transmitting the seed for generating the pseudo-random sequence from the base station to each mobile terminal at a predetermined frequency;

generating an identical pseudo-random sequence as generated at the fast allocation controller at each mobile terminal based on the seed so that each mobile terminal can identify a resource allocated thereto by the base station; and

allocating at the base station at a start of each first regular interval the available resources to the communication according to a value in the pseudo-random sequence,

wherein the generating a pseudo-random sequence generates the pseudo-random sequence by:

$X(1) = x_0$

$X(i+1) = \mathrm{mod}(a \cdot X(i) + b\text{-}1, 2^N) + 1$

where x_0 is a word of N bits, x_0 representing a seed of the sequence, a-1 is a non-zero integer which is a multiple of 4, i is a sequence index, and b is an odd number, and where N is an integer such that 2^N is greater than a maximum number of available resources.

Claim 13 (Withdrawn - Currently Amended): A method for dynamic allocation of resources to a communication between a base station and a mobile terminal, each resource including a plurality of possible values, the method comprising:

generating a matrix to store the plurality of possible values, each cell of the matrix being associated with a combination of possible values, and said matrix including at least two dimensions;

assigning an index to each cell in the matrix;

generating a pseudo-random sequence by a fast allocation controller associated with the base station; and

allocating a combination of possible values in the plurality of possible values to the communication based on the assigned index and a value in the pseudo-random sequence,

wherein the generating a pseudo-random sequence generates the pseudo-random sequence by:

$X(1) = x_0$

$X(i+1) = \mathrm{mod}(a \cdot X(i) + b\text{-}1, 2^N) + 1$

where x_0 is a word of N bits, x_0 representing a seed of the sequence, a-1 is a non-zero integer which is a multiple of 4, i is a sequence index, and b is an odd number, and where N is an integer such that 2^N is greater than a maximum number of available resources.

Claim 14 (Withdrawn - Currently Amended): A method of dynamic allocation of resources to a communication between a base station and a mobile terminal, each resource including a plurality of possible values, the method comprising:

determining a plurality of available combinations of values that are available for the base station from the plurality of possible values;

generating a pseudo-random sequence by a fast allocation controller associated with the base station;

selecting a subset of combinations of values from the determined plurality of available combinations based on a value of the pseudo-random sequence, a number of combinations of values in the subset of combinations of values being smaller than a number of combinations of values in the determined plurality of available combinations; and

allocating at least one combination of values in the subset of combinations of values to the communication between the base station and the mobile terminal,

wherein the generating generates the pseudo-random sequence by:

$X(1) = x_0$

$X(i+1) = \mathrm{mod}(a \cdot X(i) + b\text{-}1, 2^N) + 1$

where x_0 is a word of N bits, x_0 representing a seed of the sequence, a-1 is a non-zero integer which is a multiple of 4, i is a sequence index, and b is an odd number,

and where N is an integer such that 2^N is greater than a maximum number of available resources.